

Monthly Status Report

Reporting Period
August 2023

1. Introduction

1.1 Project Overview

The Kicking Horse Canyon Project – Phase 4 (KHCP4) is located on the Trans-Canada Highway approximately 4 km east of the Highway 95 junction at Golden BC. It is the final phase of the 26 km-long Kicking Horse Canyon Project which has been incrementally improving the highway to a modern four lane standard at a 100 km/h design speed, including bridge replacements and natural hazard reduction features to improve safety and reliability. The scope of work includes:

- Widening 4 km of two lane and 0.8 km of three lane highway to four lanes;
- Highway realignment to a 100 km/h design speed;
- Installation of median barrier, wildlife exclusion fencing and passages;
- Provision of snow avalanche and rock fall hazard reduction measures; and
- Shoulder widening for cyclists.

Construction of the fourth and final phase to complete the remaining – and most difficult – 4.8 kilometres is expected to be substantially complete in winter 2023-24.

Additional information and updates about the Project can be found on the Project's website <https://www.kickinghorsecanyon.ca/>

1.2 Project Delivery

Transportation Investment Corporation, a provincial Crown corporation, is delivering and overseeing this \$601 million Project. The Project is being delivered under B.C.'s Community Benefits Agreement and the Project workforce is being provided by B.C. Infrastructure Benefits Inc. (BCIB).

The Project is cost-shared, with the Government of Canada contributing \$215 million.

Kicking Horse Canyon Constructors (KHCC) was selected to design and construct the fourth and final phase of the Kicking Horse Canyon Project near Golden.

The Project is a multi-phase Project to improve safety and mobility over approximately 26 kilometres of two-lane highway. Three phases of work have been completed. The fourth and final phase to transform the remaining section of about 4.8 kilometres is under construction.

1.3 Project Goals

Based on the Ministry's mandate, six primary goals have been identified for the Project:

Transportation: Improve highway safety, capacity, and reliability of the highway corridor.

Financial: Plan and deliver the Project that meets the approved scope, schedule and budget targets cost effectively.

Environment: Reduce wildlife collision rates and minimize impacts on future wildlife movements.

Economic Development: Support the growth of the local and regional economy by improving highway safety and reliability and assist the efficient movement of people and goods along the Project corridor.

Social and Communities: Engage with Indigenous Communities, local communities, and key stakeholders to identify opportunities, issues and information pathways that will inform the delivery of the Project.

Deliverability: Constructable and operable.

2. Project Update

2.1 Project Dashboard

Objectives		Project Status	Comments
Project Delivery	Scope	●	<ul style="list-style-type: none"> The Project includes the widening of 4.8km of Highway 1 to a 4-lane 100km/h standard and is being delivered within the approved scope.
	Schedule	●	<ul style="list-style-type: none"> The Project is on schedule to be substantially completed by winter 2023/2024.
	Budget	●	<ul style="list-style-type: none"> Project spending for the month of August 2023 was \$13.6 million and total Project spending to date is \$530.4 million. Total Federal Recoveries are \$215.2 million. The Project is forecast to be delivered within budget.
	Safety	●	<ul style="list-style-type: none"> Monitored the implementation of the health and safety program and performed site visits. There have been zero (0) lost time injuries on the Project to date. Lost Time Injury Frequency Rate (LTIFR) for the Project is zero, which is less than the WorkSafeBC 2022 rate of 1.63 for Heavy Construction (Bridge, Overpass, or Viaduct Construction or Repair).
	Quality	●	<ul style="list-style-type: none"> Daily quality monitoring ongoing with no major issues observed.
	Environmental	●	<ul style="list-style-type: none"> Ongoing submission reviews for management plans. Ongoing weekly site surveillance visits.
	Archaeology	●	<ul style="list-style-type: none"> Finalizing reporting.
	Design and Construction	●	<ul style="list-style-type: none"> Oversight of Design-Build-Agreement (DBA) Project work. Compliance reviews during construction. Regular site surveillance and inspections by Project team. Ongoing traffic management and active traffic monitoring during construction.

Objectives			Project Status	Comments
	Community Benefits	Work collaboratively with BC Infrastructure Benefits Inc. (BCIB) to successfully implement the Community Benefits Agreement (CBA).	●	<ul style="list-style-type: none"> Ongoing coordination and collaboration with BCIB to implement the CBA. Discussions regarding current and future Project workforce requirements continue to progress.
Partners/Stakeholders	Indigenous Groups	Continue to build and maintain a positive collaborative working relationship.	●	<ul style="list-style-type: none"> The Project Team continues to collaborate with Indigenous Groups on key environmental values. Targets for indigenous contracting opportunities have all been achieved.
	Third Parties	Continue to build and maintain positive relationships and secure agreements with Project partners and other third parties.	●	<ul style="list-style-type: none"> Regular communication and coordination with Canadian Pacific Kansas City (CPKC).
	Public and Stakeholder Engagement	Continue to build and maintain positive relationships with the community and other stakeholders.	●	<ul style="list-style-type: none"> Ongoing work to enhance quality and reliability of traffic notifications. Regular website and social media updates including highway status calendar and stakeholder notices.

(CPKC)

Status	Description
●	Managing critical issues, negotiating resolution; action required immediately
●	Managing some issues, negotiating resolution; action required in the near term
●	Stay the Course – no action required

3. Project Documents and Achievements to Date

Project Delivery	Project Planning and Development	<ul style="list-style-type: none"> • Business Case Supplemental Memo (2019) • Cost Report (2019) • Risk Report (2019) • Executed Design-Build-Agreement (November 2020)
	Environmental	<ul style="list-style-type: none"> • Environmental Synopsis Report (2016) • Various Environmental Reports (2005 – 2016)
	Archaeology	<ul style="list-style-type: none"> • Heritage Inspection Permit 2019-0208 (2019) • Archaeological and Heritage Resource Management Plan (AHRMP)_(August 2020) • Site Alteration Permit 2020-0297 (October 2020) and subsequent amendments
	Community Benefits	<ul style="list-style-type: none"> • Community Benefits Agreement (July 2018) • BCIB Health and Safety Program (March 2020) • BCIB-AIRCC Enabling Agreement (May 2020) • Project Definition: Trans Canada Highway #1 – Kamloops to Alberta Border 4-Laning Project (March 2020) • BCIB-Contractor Agreement (March 2020) • BCIB-Subcontractor Agreement (March 2020)
	Third Parties	<ul style="list-style-type: none"> • Contribution Agreement – Government of Canada (2017)

4. Monthly Highlights and Three Month Lookahead

4.1 Safety

Scope:	<ul style="list-style-type: none">• Establish Occupational Health and Safety (OH&S) Project delivery objectives and performance measures.• Manage Project OH&S activities and monitor performance metrics.• Ensure the Project complies with relevant WorkSafeBC regulations and government requirements.• Outline relevant health and safety management processes and activities.
Monthly Highlights:	<ul style="list-style-type: none">• Conducted Site Safety Audits on August 31 (fall protection), no significant issues identified.• There were 11 first aid incidents, two (2) medical aid incident, zero (0) near misses, and two (2) equipment damage incidents for the month of August.• Lost Time Injury Frequency Rate (LTIFR) for the Project is 0, which is less than the WorkSafeBC 2022 average of 1.63 for Bridge, Overpass, or Viaduct Construction or Repair (subsector Heavy Construction).
Three Month Lookahead:	<ul style="list-style-type: none">• Maintain Province's Safety Management Plan for implementation as part of the Design-Build Agreement to align with KHCC, Transportation Investment Corporation (TIC), the Owner's Engineer (OE) and Ministry of Transportation and Infrastructure requirements.• Conduct orientation and safety training for onsite personnel as required.• Conduct surveillance audits of KHCC's safety management performance.

4.2 Quality

Scope:	<ul style="list-style-type: none">• Establish quality objectives and performance measures.• Monitor relevant quality management performance metrics.• Manage Project quality management activities.
Monthly Highlights:	<ul style="list-style-type: none">• Received three (3) Non-conformity Reports (NCRs) related to pipe strength and pile tolerance; no significant issues found. To date there have been a total of 105 NCRs (1 open and 104 closed).• Conducted quality audit on August 2, related to field team construction monitoring, no significant issues identified.
Three Month Lookahead:	<ul style="list-style-type: none">• Oversee quality of KHCC work onsite.• Record and distribute daily observation reports of work onsite.• Review KHCC quality records for compliance to the DBA.• Conduct monthly audits of KHCC quality processes.

4.3 Environmental

Scope:	<ul style="list-style-type: none">• Complete environmental reviews of KHCC's submissions.• Support communications team with stakeholder engagement.• Conduct site surveillance and provide environmental support to Project as and when needed.
Monthly Highlights:	<ul style="list-style-type: none">• Reviewed KHCC submissions.• Regular and ongoing site environmental surveillance.
Three Month Lookahead:	<ul style="list-style-type: none">• Ongoing review of KHCC's environmental submissions.• Conduct site environmental surveillance.• Continue collaboration with the Golden District Rod and Gun Club and the Ktunaxa Nation Council on bighorn sheep monitoring.

4.4 Archaeology

Scope:	<ul style="list-style-type: none">• Managing, directing, and undertaking all archaeological work, including Archaeology Impact Assessment (AIA), Systematic Data Recovery (SDR), and monitoring.• Providing the Province and KHCC with information for the management of archaeological and heritage resources.• Responding to chance archaeological or heritage finds.
Monthly Highlights:	<ul style="list-style-type: none">• Finalizing reporting.
Three Month Lookahead:	<ul style="list-style-type: none">• Complete reporting by September 2023.

4.5 Design and Construction

Scope:	<ul style="list-style-type: none">• Travel demand forecasting, traffic operations modelling, traffic data collection, and other related engineering services in support of the traffic management regime proposed for the Project.• Provide technical support to the Project team during the review of contractor submittals.• Oversight of DBA Project work.• Compliance reviews during construction.• Develop plans for managing traffic along the alternate route Highway 93/95 during full Project closures.• Establish agreements with other jurisdictions for provision of services along the alternate route.
Monthly Highlights:	<ul style="list-style-type: none">• Sheep's Bridge – Expansion joint and parapet wall concrete curing ongoing.• Bighorn Bridge – Concrete finishing on the underside of the bridge completed.

	<ul style="list-style-type: none"> • Bighorn Viaduct – Deck pour completed. Form work for parapets ongoing. • Lynx Viaduct – Westbound substructure works ongoing; deck formwork in progress ahead of concrete pours. • Frenchman’s Bridge / Viaduct – Parapet wall and expansion joint form work installation ongoing. • Elk Viaduct – Expansion joint construction ongoing. • Cut 4 – Rock attenuator anchors, cables and mesh installation ongoing. • Wolf Viaduct Deck bottom formwork installation ongoing. • Bison Upslope Wall – Installation of slope protection ongoing. • Pronghorn Upslope – Mechanical excavation of material ongoing. • Grizzly Viaduct – Expansion joint construction ongoing. Utility duct installation ongoing. • Grizzly Walls – Coping concrete pour at Grizzly Wall 2 completed. • Blackwall Bridge – Permanent utility bracket installation ongoing. • Marmot Viaduct – Utility duct installation under viaduct structure ongoing. • Caribou Viaduct – Excavations for utility trenches ongoing. Storm drainpipe installation ongoing. • Caribou Avalanche Wall – Placing, grading and compacting of road gravel ongoing. • Hedgehog Wall/Viaduct – Deck concrete curing ongoing.
Three Month Lookahead:	<ul style="list-style-type: none"> • Full road closures planned for September 18 - 22, and September 25 - October 6. • Monitor slope survey works. • Undertake site surveillance, inspections, and audits by Project team, including OE Lead Engineer, OE Quality Manager, and OE Safety Advisor. • Administer the Commuter Pass Program for 2023. • Monitor KHCC traffic management performance through site.

4.6 Indigenous Groups

Scope:	<ul style="list-style-type: none"> • Fulfill Province’s duty to consult and accommodate Indigenous communities and facilitate engagement and collaboration with communities on environmental and socio-economic interests.
Monthly Highlights:	<ul style="list-style-type: none"> • Facilitated Project team meetings with Indigenous communities. • Continued collaboration with KHCC Indigenous contracting and employment coordinator (ICEC) on employment and contracting opportunities for Indigenous Groups.
Three Month Lookahead:	<ul style="list-style-type: none"> • Continue regular meetings with Indigenous Groups, including the Pespesellkwe, Ktunaxa, and Shuswap Indian Band. • Continue monitoring and collaring of Bighorn sheep with Ktunaxa Nation Council (KNC) and Golden Rod and Gun Club.

4.7 Third Parties

Scope:	<ul style="list-style-type: none"> • Develop utilities and rail agreements as required.
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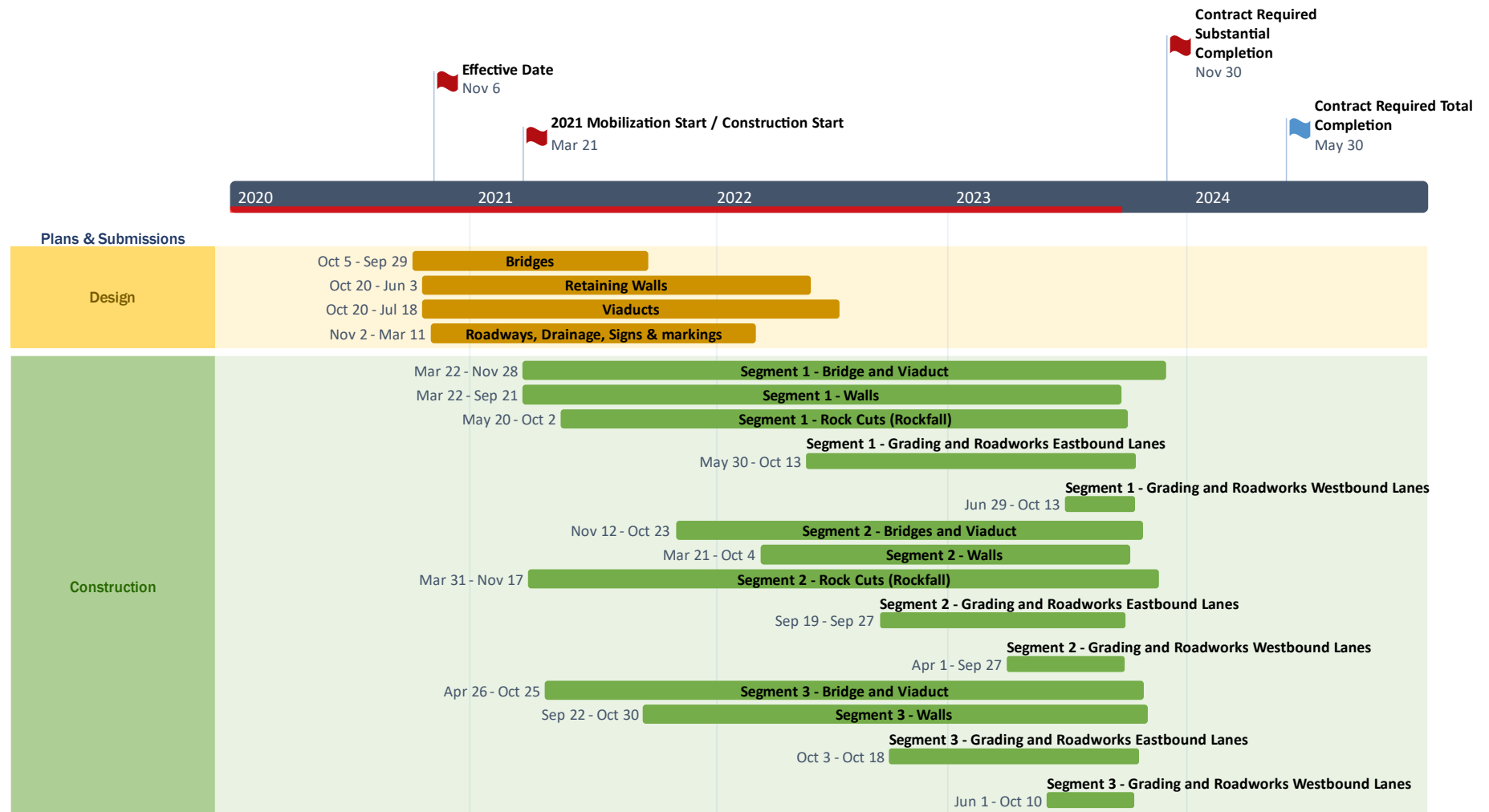
	<ul style="list-style-type: none"> Secure local and regional government approvals as required.
Monthly Highlights:	<ul style="list-style-type: none"> Continued regular communication and coordination with CPKC.
Three Month Lookahead:	<ul style="list-style-type: none"> Continue implementation of Protocol Agreement. Coordinate construction activities with CPKC.

4.8 Public and Stakeholder Engagement

Scope:	<ul style="list-style-type: none"> Manage ongoing public and stakeholder communications and engagement.
Monthly Highlights:	<ul style="list-style-type: none"> Released monthly Project newsletter. Responded to 146 public/stakeholder inquiries. Continued planning for fall 2023 milestone event to mark substantial completion.
Three Month Lookahead:	<ul style="list-style-type: none"> Oversight of KHCC's communication and public engagement obligations and activities. Build awareness of construction and traffic management activities with media info bulletins/interviews, website updates, newsletters and advisories, and social media. Continue planning for the final extended closures in early September and early October. Continue direct dialogue with key stakeholders.

5. Schedule

The following schedule depicts deliverables, milestones and associated dates and timelines for the implementation phase of the Project, as well as anticipated construction timelines.



6. Project Photos



Figure 1: Lynx Viaduct – Deck construction ongoing – August 30, 2023



Figure 2: Bison Upslope Wall – Shotcrete wall installation ongoing – August 29, 2023



Figure 3: Sheep Bridge – Deck and parapet construction ongoing – August 31, 2023

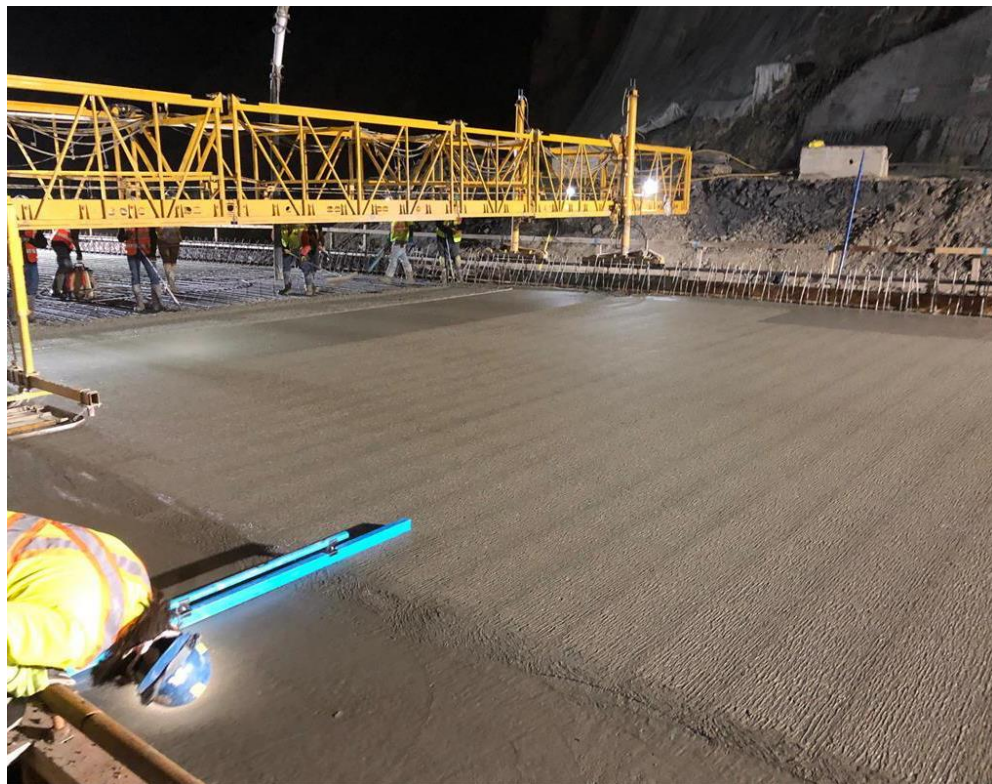


Figure 4: Hedgehog Viaduct – Deck pour during night shift – August 29, 2023



Figure 5: Blackwall Bridge – Utility duct installation under bridge ongoing – August 22, 2023



Figure 6: Caribou Avalanche Wall – Median construction ongoing – August 30, 2023